

Claims

1. A multiwall nanotube having an outer wall and at least one inner wall, wherein
 - only the outer wall is oxidized, and
 - the inner wall or walls is/are not oxidized.
2. A multiwall nanotube as claimed in claim 1 which is a multiwall carbon nanotube or a multiwall nanotube doped with boron nitride.
3. A process for oxidizing only the outer wall of a multiwall nanotube, which comprises
 - providing a multiwall nanotube,
 - subjecting the multiwall nanotube to oxidation, and
 - isolating the multiwall nanotube which has been treated in this way.
4. The process as claimed in claim 3, wherein the multiwall nanotube used is a multiwall carbon nanotube or a nanotube doped with boron nitride.
5. The process as claimed in claim 3 or 4, wherein the oxidation is carried out by reaction with a strong acid.
6. The process as claimed in claim 5, wherein the strong acid used is nitric acid, sulfuric acid, chromic acid, Caro's acid, perchloric acid, iodic acid or an organic peracid.
7. The process as claimed in claim 6, wherein sulfuric acid is used as a mixture with hydrogen peroxide.
8. The process as claimed in any of claims 3 to 7, wherein the oxidation of the outer wall of the multiwall nanotube is carried out at room temperature or at a temperature up to the boiling point of the respective reaction mixture.
9. A substrate on which a multiwall nanotube as claimed in claim 1 or 2 is bound.
10. An electronic component comprising a substrate as claimed in claim 9.